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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/671,359

09/25/2003

Charles Zdzislaw Loboz

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08/21/2006

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EXAMINER

TIMBLIN, ROBERT M

ART UNIT

PAPER NUMBER

2167

DATE MAILED: 08/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/671,359

Applicant(s)

LOBOZ ET AL.

Examiner

Robert M. Timblin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 6/16/2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This office action corresponds to application 10/671,359 and applicant's remarks/amendments filed 6/16/2006.

Response to Amendment

Examiner acknowledges the Applicant's amendments to the drawings and specification and therefore removes the corresponding objections.

Claim Rejections - 35 USC § 112

Regarding claims 1-3, the phrase "may be obtained" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim 3 is objected to for improper preamble language. Specifically, the claim is directed towards steps (a-c) that define a *method*. As the claim stands (i.e. "the said database comprising), there is confusion as to whether claim 3 is a method claim or an apparatus claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 6-8, and 10-17, are rejected under 35 U.S.C. 102(b) as being anticipated by **Krychniak** (U.S. Patent 6,192,357 B1).

With respect to claim 1, **Krychniak** discloses a method for implementing a database, comprising the steps of:

‘providing at least one set of linked entities’ as dimensions 1-3 (fig. 1).

‘at least one set of linked entities contains a plurality of entities keyvals and each said entity in the said plurality of entities is arranged to store at least one data value’ attributes (fig. 1).

‘providing an additional entity in the said database for said at least one set of linked entities’ fact table (fig. 1).

‘storing in the additional entity the aggregation of a plurality of data values contained in the said at least one set of linked entities, whereby the aggregated data values may be obtained by performing a read operation on the additional entity’ (col. 2 lines 11-28).

Claims 2, 3, 6, 7, and 8, contain essentially the same subject matter as that of claim 1 as set forth above. Therefore, claims 2, 3, 6, 7, and 8, are rejected for the same reasons as claim 1 set forth above.

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With respect to claim 10, **Krychniak** discloses **'at least one set of linked entities'** (fig. 1).

With respect to claim 11, **Krychniak** discloses **'an aggregation of all data values stored in the at least one set of linked entities'** fact table (fig.1).

With respect to claim 12, **Krychniak** discloses **a computer program arranged, when loaded on a computing system, to implement the method'** as an apparatus (claim 6).

With respect to claim 13, **Krychniak** discloses **'a computer readable medium providing a computer program'** as an apparatus (claim 6).

With respect to claims 14-17, **Krychniak** teaches **'a computer readable medium providing a computer program'** as an apparatus (claim 6).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4, 5, 9 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Krychniak** as applied to claims 1-3, 6-8 and 10-17 above in view of **Prabhakaran et al.** ('Prabhakaran' hereinafter) (US Patent 6,859,758 B1).

With respect to claim 4, **Krychniak** fails to disclose determining the read/write ratio of the database.

Prabhakaran, however, discloses determining the read/write ratio of the database' as using a read to write ratio (col. 5, line 49 – col. 6, line 24 and fig. 3) to measure the performance of storage system.

It would have been obvious to one of ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because **Prabhakaran's** teaching would have allowed **Krychniak** to measure the performance of storage system (Prabhakaran, col. 2, lines 20-23). Furthermore, read and/or write commands would be provided to test the storage system (Prabhakaran, col. 2, lines 30-42) to further optimize the query generation system of Krychniak.

With respect to claims 5 and 9, **Prabhakaran** discloses 'providing data with regard to the time taken to perform a read operation and a write operation on a first implementation of the said database' as generating read/write commands to a database storage system (col. 2, lines 30-42 and fig. 3).

'providing data with regard to the time taken to perform a read operation and a write operation on a second implementation of the said database' as stress tests can be spawned against a plurality of databases (col. 2, lines 35-40).

'calculating a read time difference between the time taken to perform a read operation on said first implementation of said database and on said second implementation of said database' and **'calculating a write time difference between the time taken to perform a write operation on said first implementation of said database and a second implementation of said database'** as testing all reads and all writes as there may be a performance difference between read and write operations (col. 5, lines 55-65).

'calculating the ratio between the read time difference and the write time difference to determine the read/write ratio for said database' as statistical information containing read and write operations completed by the database (col. 6 line 62 – col. 7, line 2). Furthermore, performance measures include a mixture of read and write operations for comparing architectures (col. 7, lines 10-18).

With respect to claim 18, **Prabhakaran** teaches **'establishing a critical Read/Write Ratio'** and **'utilizing said critical Read/Write ratio to increase performance in said database'** as a desired ratio of reads and writes. This ratio is used to achieve a desired rate of operations to obtain performance measurements (abstract).

Response to Arguments

Applicant's arguments with respect to claims 1-3, 5-8, and 10-13 have been considered but are moot in view of the new ground(s) of rejection.

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As can be seen in the rejection above, the Krychniak reference teaches the limitations of claims 1-3, 5-8, and 10-13.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert M. Timblin whose telephone number is 571-272-5627. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Cottingham can be reached on 571-272-7079. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Leslie Wong



Primary Examiner

RMT
8/2/06

Robert M. Timblin



Patent Examiner AU 2167